Finding of Consistency

CSUSM University Village Housing and Dining

MARCH 2023

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Table of Contents

SECTION **PAGE**

TABLES

FIGURES

APPENDIX

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
ACI	American Concrete Institute
APCD	Air Pollution Control District
CAP	Climate Action Plan
CBC	California Building Code
CEQA	California Environmental Quality Act
CSU	California State University
CSUSM	California State University San Marcos
DTSC	Department of Toxic Substances Control
FEIR	Final Environmental Impact Report
FOC	Finding of Consistency
GWP	Global-Warming Potential
FTE	Full-Time Equivalent
LOS	Level of Service
LUST	Leaking Underground Storage Tank
MTDB	Metropolitan Transit Development Board
NCTD	North County Transit District
SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas and Electric
SIP	State Implementation Plan
SWRCB	State Water Resources Control Board
UBC	Uniform Building Code
VMT	Vehicle Miles Traveled

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1 Introduction

1.1 Project Overview

California State University, San Marcos (CSUSM) is proposing the University Village Housing and Dining Project # SM-1056 (proposed project). The project involves the construction of a 7-story, 137,570 GSF building with 555 total beds. The project site is located on an existing parking lot (Lot O), at the corner of Campus Way and Campus View Drive. The project includes demolition of the existing parking lot and grading to support construction of the building with associated underground utilities and concrete surface improvements.

The project is consistent with the current Campus Master Plan, originally adopted in March 1988 and most recently amended in January 2018. The Campus Master Plan identifies an ultimate enrollment of 25,000 Full Time Equivalent Students (FTES). The campus currently has an enrollment of 12,864 FTES (CSUSM 2023a). The Board of Trustees of the California State University certified the 1988 Campus Master Plan Final Environmental Impact Report (1988 FEIR) in March 1988 prior to approving the Campus Master Plan

1.2 California Environmental Quality Act Compliance

A Finding of Consistency (FOC) is proposed to satisfy the California Environmental Quality Act (CEQA) requirements for the project. Section 15168(c) of the CEQA Guidelines allows a project to be found "within the scope" of a program EIR when the project is identified in the EIR project description (in this case, the Master Plan). If no new or substantially greater impacts would occur due to changes in the project, project circumstances, or substantial new information, as described in Section 15162, then the project may rely upon that prior EIR. This FOC describes the proposed project and compares the potential impacts to those identified in the 1988 FEIR. The analysis demonstrates that the proposed project is consistent with the Campus Master Plan and the certified 1988 FEIR.

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2 Project Description

2.1 Project Location

The proposed project is located in the city of San Marcos. Figure 1 shows the regional location of the project and campus. The project site is in the northeastern portion of the CSUSM campus at the corner of Campus Way and Campus View Drive. The project address is 303 Campus View Dr, San Marcos, California 92078. Figure 2 shows the project location within CSUSM campus, currently referred to as "Parking Lot O".

2.2 Environmental Setting

The site is currently occupied by an existing parking lot, called Parking Lot O. The site generally slopes from east to west, with elevations varying from approximately 600 to 630 feet. The parking lot is graded to drain runoff to an existing curb-face opening catch basin in the northwest corner of the project site. The existing lot consists of alluvium and granitic rock along the southwestern portion and compacted fill over alluvium in the northeastern portion (geotechnical report).

2.3 Project Characteristics

The CSUSM project would be a new living and learning community, including affordable student housing, dining and food service, students living spaces, and outdoor spaces. The project would support a larger need for first year student on campus housing and would stimulate a robust resident life community for CSUSM. Figure 3 depicts the site plan, including proposed project features and current surrounding features.

The proposed project involves the construction of a 7-story, 137,570 GSF building with 555 beds in 285 bedrooms. The 9,963 GSF dining facility would be located on the second floor, above first floor mechanical and storage space. The total building height is 76 feet above grade. The project would require demolition of Parking Lot O, grading, a new access road, and some non-native/vegetation removal. The project site area of approximately 2.5 acres would include pedestrian pathways, a loading area for the dining hall, an emergency access lane, outdoor learning spaces, and landscaping. The project would embody environmentally sustainable strategies throughout the design, such as seeking LEED Silver.

The project is identified on the Master Plan Map, Figure 4, as part of the University Village Apartments (building 38). The proposed project would be a single structure with four wings, rather than two adjacent structures. Therefore, a Minor Amendment to the Campus Master Plan may be required.

Figure 5 depicts a rendering of the proposed project from the viewpoint of E. Barham Dr./Campus Way.

2.4 Project Construction and Phasing

The project is a “design build” project which would be constructed in one phase, beginning in March 2024. Demolition of existing surface, safe-off, and relocating of existing utilities would take place the first month of construction. Completion of construction is expected to finish June 25, 2026, in time for the Fall 2027 Semester (CSUSM 2023d).

2.5 Project Approvals

The actions and/or approvals that CSUSM needs to consider for the proposed project include, but are not limited to, the following. This list is preliminary, and may not be comprehensive:

- Minor Master Plan Amendment
- Construction Approval

3 Environmental Issue Checklist Areas

The 1988 FEIR analyzes the Campus Master Plan's impacts related to aesthetics, air quality, biological resources, cultural resources, geology and soils, hydrology and flood control, land use, natural resources, noise, transportation and circulation, socioeconomics (population and housing), public services and utilities, and landform and topography. The following discussion addresses each of the environmental issues studies in the 1988 FEIR to determine if the proposed project has the potential to create new significant impacts or an increase in impacts identified in the 1988 FEIR. This analysis will also include issues of greenhouse gas emissions, energy, and hazards and hazardous materials as new topics in the following analysis.

3.1 Aesthetics

The 1988 FEIR determined that the proposed campus was consistent with the Community Design Element of the Heart of the City Specific Plan, which was adopted by the City of San Marcos and considered the campus development. The campus would substantially alter the visual character of the site; however, the project design would minimize the physical terrain alterations by concentrating development of previously graded areas, at the base of hills, and below major on-site ridgelines. Mitigation measures, including accent planting with tall vertical elements, hydroseeding, and use of reclamation measures would be implemented to minimize effects. The project would preserve the major ridgeline, maximize natural topography in grading, provide the community with a positive image, and minimize visibility from future residential developments. In addition, campus development would eliminate existing blight, promote retention of natural and landscaped visual quality through open space preservation, and provide architectural and planning techniques that are compatible with the community theme in San Marcos. Therefore, aesthetic impacts were found to be less than significant after mitigation.

The proposed project is adjacent to existing structures on an existing parking lot. As shown in Figure 5, the project, while taller than the adjacent University Village buildings, is consistent in form with the surrounding campus development and would not block major ridgelines. The project is consistent with the Campus Master Plan, and would be subject to mitigation measures from the 1988 FEIR, specifically Measure 16 (regarding landscape plantings). The proposed project is aesthetically consistent with the surrounding campus development and would not result in any significant new, or substantially greater, impacts to aesthetics beyond what was identified in the 1988 FEIR.

3.2 Air Quality

The 1988 FEIR identifies increased vehicular emissions and increased construction activity impacts as a result of the Campus Master Plan implementation. However, these impacts were found to be less than significant at the project level. The plan was found to have a cumulatively significant impact to air quality. The 1988 FEIR includes several mitigation measures derived from the Heart of the City Specific Plan. Mitigation measures include working with the Metropolitan Transit Development Board (MTDB) to extend transit (which has been implemented), monitoring transit needs, improving traffic flow (to be implemented by the City of San Marcos), and preparing dust control plans for construction consistent with San Diego Air Pollution Control District (SDAPCD) standards. The 1988 also included mitigation to address an aggregate mining project on the campus site (to remove significant mineral resources prior to full development of the campus), which is not applicable.

The construction and operational air emissions of the proposed project were modeled to determine if the project is consistent with the 1988 FEIR analysis. Table 1 shows the daily construction emissions for the proposed project. As shown, maximum daily emissions are well below the recommended SDAPCD thresholds of significance, relying only on SDAPCD standard dust control measures. The construction estimate is based on information provided in the plans, the basis of design, and construction schedule for the proposed project (CSUSM 2023b, 2023c, and 2023d).

Table 1. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions - Unmitigated

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
2024	1.98	21.20	19.90	0.05	4.67	2.39
2025	1.88	11.90	19.40	0.03	1.87	0.73
2026	42.30	11.40	18.00	0.03	1.82	0.69
Maximum Daily Emissions	**42.30**	**21.20**	**19.90**	**0.05**	**4.67**	**2.39**
Threshold	*75*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns.
See Appendix A for complete CalEEMod results. The values shown are the maximum summer or winter daily emissions results from CalEEMod. These estimates reflect compliance with SDAPCD Rule 55 - Fugitive Dust Control, assuming watering of the project site two times per day.

Table 2 shows the estimated daily operational emissions resulting from the proposed project. As shown, project emissions are well below the recommended SPAPCD thresholds of significance. Operational emission sources include area sources, such landscape maintenance, energy use (both electricity and natural gas), and stationary sources (the project would include a 150 kW back-up generator). Note that mobile emissions (vehicular traffic) was not modeled. This is because the project would not add FTES to the campus. The objective of the project is to house first year students on campus who are otherwise living off-campus and likely commuting to the campus. By replacing off-campus students with on-campus students, overall vehicular traffic is estimated to decline. First-year residents are discouraged from keeping an automobile on campus.

Table 2. Estimated Maximum Daily Operation Criteria Air Pollutant Emissions - Unmitigated

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Area	4.28	0.12	12.20	<0.01	<0.01	0.01
Energy	0.04	0.67	0.41	<0.01	0.05	0.05
Mobile	0.00	0.00	0.00	0.00	0.00	0.00
Stationary	0.33	0.92	0.84	<0.01	0.05	0.05
Total	**4.65**	**1.71**	**13.45**	**<0.01**	**0.10**	**0.11**
Threshold	*75*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; <0.01 = reported value less than 0.01; negative values are presented in parentheses.
See Appendix A for complete results. Totals may not sum due to rounding. The values shown are the maximum summer or winter daily emissions results from CalEEMod.

The proposed project is consistent with the Campus Master Plan. Project air emissions related to construction and operation would not result in any significant new, or substantially greater, impacts to aesthetics beyond what was identified in the 1988 FEIR.

3.3 Biological Resources

The 1988 FEIR found the campus site contained potential habitat, including riparian, coastal sage scrub, and chaparral. The FEIR found that the proposed campus design and the implementation of mitigation measures would reduce potential biological impacts to a less-than-significant level. Mitigation measures to further reduce the biological impact include field studies of the riparian habitats along the eastern site boundary, hydroseeding of cut slopes and adjacent graded areas with native seed mixes similar to the surrounding habitat, and the preservation of open space areas and their native scrub habitat.

The proposed project site consists of an existing parking lot and landscaped area. The site is adjacent to existing development (University Village Apartments). Minor removal of trees and vegetation may be required. Therefore, the proposed Project would not result in any significant new, or substantially greater, impacts to biological resources beyond those identified in the 1988 FEIR.

3.4 Cultural Resources

The 1988 FEIR found that impacts to cultural resources would be less than significant with the implementation of mitigation measures. Surveys identified three potential historic locations within the campus site and two isolated prehistoric artifacts. The two isolated prehistoric artifacts were collected, and no further evidence of prehistoric occupation was noted. The three potential historic sites consisted of a post and pier foundation which occupied a location of an earlier structure, a turn of the century house foundation, and a concrete frame foundation. If preservation and avoidance of cultural sites was found to be not feasible, a subsurface testing program was recommended to be conducted by qualified historical archologists and includes a systematic testing for subsurface remains, salvage of significant features, photo record of the impacted structures, and preparation of a written report. Implementation of the subsurface testing program mitigated the potential impacts to the historic sites to a level of insignificance.

The 1988 FEIR determined there would be no impacts to any known or unknown paleontological resources. Granitic rocks found at the site do not contain fossil remains and the sedimentary deposits are too young geologically to produce fossils.

The proposed project is consistent with the Campus Master Plan and is located within the area surveyed for cultural, historical, and archaeological resources. The project site is not located near the three identified historic sites. Part of the project site has been previously developed as a parking lot, and is unlikely to contain undiscovered resources. Therefore, the proposed project would not result in any significant new, or substantially greater, impacts to cultural resources beyond those identified in the 1988 FEIR.

Tribal Cultural Resources

Tribal cultural resources were not identified as a distinct resource category at the time the 1988 FEIR was certified. Nevertheless, the cultural resources analysis considered resources related to Native American tribes. As discussed above, two isolated prehistoric artifacts were found on the project site, and determined to be less than significant.

A subsequent records search conducted in 2010 determined that no additional records of cultural resources were available (CSUSM 2016). The project site consists primarily of an area previously disturbed for construction of Parking Lot O, and is unlikely to contain undiscovered resources. Therefore, the proposed project would not result in any significant new, or substantially greater, impacts to tribal cultural resources beyond those identified in the 1988 FEIR.

3.5 Geology and Soils

Earthquakes and Ground shaking

The 1988 FEIR determined that impacts related to earthquakes and ground shaking were less than significant. There are no known faults in the City of San Marcos. The closest faults most likely to affect San Marcos are the Elsinore fault, approximately 15 miles to the northeast, the Colorado Banks fault, approximately 25 miles southeast, and the Rose Canyon fault, which is potentially active and approximately 8 miles to the west. A major earthquake along any of these faults, or in the San Jacinto fault zone located approximately 42 miles northeast of San Marcos, has potential to cause ground shaking in the area. However, conformance to the seismic design requirements and procedures in the Uniform Building Code (UBC) would reduce this risk to less than significant.

The proposed project would involve the construction of three residential wings and an attached dining facility. Seismic joints would be required between the dining structure and the residential towers to act as two seismically independent structures. The north wing would be designed as a seismically independent structure. The east wing, south wing, and the central elevator core will be designed to act as a single structure. Core walls at the restrooms, a central core at the elevators, and planar shear walls near the end of each building would reduce torsional impacts and resist seismic forces. A lateral force resisting system be designed to account for different lateral earth pressures in combination with the building seismic forces. The lateral force resisting system would consist of special reinforced shear walls to resist lateral loads and transfer the lateral forces to the vertical elements of the system. The concrete shear walls are designed to meet the ductility requirements of the American Concrete Institute (ACI) 318-19 section 18.10. The proposed project would be required to comply with the CSU Seismic Safety Standards, the California Building Code (CBC), and the latest UBC to ensure that all new buildings would be capable of withstanding potential ground shaking. Therefore, the proposed project would not result in significant new, or substantially greater, impacts relating to earthquakes and ground shaking beyond what was identified in the 1988 FEIR.

Soils

The 1988 FEIR found that impacts related to soils would be less than significant with mitigation incorporated. Alluvial deposits found at the project site were found to be potentially compressible and required removal and re-compaction to a limited depth. These potentially expansive soils required special consideration and further evaluation regarding their potential for liquefaction, soil settlement, soil expansiveness, and compressibility. Therefore, a geotechnical and soils investigation analysis is required for development projects on campus. A landscape and irrigation plan is also required minimize erosion and slumping.

A geotechnical investigation was prepared for the proposed project, which found there may be unbalances soil loads on portions of the structure due to sloping grades and site configuration. The lateral force restraining system would be designed to account for these pressures. Excavation and import of suitable soils would be required. Therefore, the proposed project would not result in any significant new, or substantially greater, impacts related to geology and soils beyond those identified in the 1988 FEIR.

3.6 Greenhouse Gas Emissions

The 1988 FEIR does not discuss greenhouse gas (GHG) emissions. The courts have stated that climate change and GHG are not "new information" within the meaning of CEQA Guidelines Section 15162. Therefore, the omission of a GHG discussion in the prior EIR does not preclude its use for subsequent project. However, to demonstrate the proposed project does not constitute a substantial change in the Campus Master Plan (the prior "project") or the project circumstances, the GHG emissions resulting from construction and operation of the proposed project has been estimated. As shown in Table 3, construction emissions (primarily from the use of heavy equipment) would result in 962.70 metric tons of carbon dioxide equivalent (CO_2e).[1] GHG emissions from construction are typically "amortized" over a time period consistent with the operation of this building. 30 years is used here (a reasonable period of time before major renovations may be required of the project structure).

Table 3. Estimated Annual Construction Greenhouse Gas Emissions - Unmitigated

Year	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
2024	418.00	0.02	0.02	0.28	424.00
2025	496.00	0.02	0.02	0.36	502.00
2026	36.30	<0.01	<0.01	0.02	36.70
Total	**950.30**	**0.04**	**0.04**	**0.66**	**962.70**
				Amortized Construction Emissions Over 30 years	*32.09*

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R=refrigerants, CO_2e = carbon dioxide equivalent.
Totals may not add due to rounding.
See Appendix A for complete results.

Table 4 shows the estimated annual GHG emissions resulting from operation of the project.

Table 4. Estimated Annual Operational Greenhouse Gas Emissions – Unmitigated

Emission Source	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Area	2.72	<0.01	<0.01	--	2.73
Energy	138.00	0.01	<0.01	--	138.00
Mobile	0.00	0.00	0.00	--	0.00
Stationary	3.83	<0.01	<0.01	--	3.84
Solid waste	23.70	2.37	0.00	--	83.10
Water	4.81	0.34	0.01	--	15.70
Refrigerants	--	--	--	2.74	2.74
Total	**173.06**	**2.72**	**0.01**	**2.74**	**246.11**
				Amortized 30-Year Construction Emissions	*32.09*
				Project Operations + Amortized Construction Total	**278.20**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R=refrigerants; CO_2e = carbon dioxide equivalent
See Appendix A for complete results.

[1] CO_2e is a metric measure used to compare the emissions from various greenhouse gases on the basis of their global-warming potential (GWP), by converting amounts of other gases to the equivalent amount of carbon dioxide with the same GWP.

As discussed in Air Quality, above, the project is not expected to induce additional travel. Therefore, mobile emissions have not been included. As shown, annual GHG emissions, including amortized construction emissions, would be 278.20 metric tons of CO_2e. Neither the CSU, the State of California, or the SPACPD has adopted an applicable GHG emissions threshold. However, to put the emissions in a local perspective, the City of San Marcos had adopted a climate action plan (CAP). The CAP identified a screening threshold of 500 metrics tons CO_2e. City project which emit levels above that threshold are further analyzed for consistency with the CAP. For purposed of comparison, the proposed project falls below the level where other projects within the City of San Marcos would require further analysis.

CSUSM has proposed a solar microgrid project to offset the energy usage of planned developments, including the proposed project. Phase 1 of the microgrid project would construct a 2,000 kW PV generation system and 4,500 kWh/4hour Battery Energy Storage System. This is in addition to an existing 130kW solar system, and two 440 kW fuel cell plants. A planned second phase would add an additional 1,500 kW to offset the potential decommissioning of the fuel cell plants in 2035. It is expected that the Phase 1 microgrid project will be online prior to completion of the proposed project. Therefore, the energy-related project emissions shown in Table 4 consists only of emissions from natural gas, which may be used for heating and food preparation in the facility.

The proposed project is consistent with the buildout assumptions of the Campus Master Plan and the 1988 FEIR. In addition, existing and planned microgrid systems on the campus. Therefore SOM, the proposed project would not result in any significant new, or substantially greater, impacts related to geology and soils beyond those identified in the 1988 FEIR.

3.7 Hazards and Hazardous Materials

Hazards and hazardous materials were not discussed in the 1988.. In order to ensure that no change in circumstances or substantial new information has occurred, a search of hazardous material databases, collectively known as the Cortese List, was conducted.

The following databases compiled pursuant to Government Code Section 65962.5 were checked on March 1, 2023 for known hazardous materials at the project site:

- EnviroStor search for cleanup sites and hazardous waste facilities – Department of Toxic Substances Control (DTSC)
- GeoTracker search for leaking underground storage tanks (LUST) – State Water Resources Control Board
- List of solid waste disposal sites – State Water Resources Control Board
- List of active Cease and Desist Orders and Cleanup and Abatement Orders – State Water Resources Control Board
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code – Department of Toxic Substances Control

There are no hazardous cleanup sites within a half mile radius of the project site (Dudek 2023). There are six closed cases of LUST sites in a half mile radius of the site, all of which have been mitigated, and the records closed. One closed record pertained to potential pesticides/herbicides, petroleum/fuels/oils, and polychlorinated biphenyls on the campus site that had the potential to contaminate the soil. This record was likely an investigation into the then-proposed CSUSM campus. This case was closed in 1995 and does not have the potential to affect the project site (Dudek 2023). The project site is not found in the list of solid waste disposal sites, active Cease and Desist Orders and Cleanup and Abatement Orders, or hazardous waste facilities subject to corrective action. Consistent with the 1988 FEIR, the proposed project would not have any impacts to hazards or hazardous materials.

3.8 Hydrology and Water Quality

The 1988 FEIR determined that hydrological impacts were less than significant after implementation of mitigation measures. The University campus altered existing drainage features and resulted in the increase of impervious surfaces by covering drainage courses and other natural areas with impervious materials. This had the potential to result in an increase of local peak runoff rates and direct surface runoff into San Marcos Creek, therefore a possibility of increasing erosion, siltation, and sedimentation, and decreasing natural percolation and groundwater recharge rates. However, an on-site storm drain was be designed to control on-site surface drainage into the streets or in drainage conveyance systems. The site grading plan was designed to control and measure erosion, siltation, and dust. Coordination with the City of San Marcos and the County of San Diego Flood Control District ensured that runoff and erosion quantities are accommodated by downstream drainage systems. Drainage courses were maintained in their natural state, where possible, and disturbed areas were restored with native plants and natural rock replacement. The City replaced the open drainage channel along Twin Oaks Valley Road with an underground box culvert. The hydrological impacts identified in the 1988 FEIR were mitigated to an insignificant level.

The proposed project is consistent with the hydrology analysis of the 1988 FEIR. The proposed project site is an existing parking lot; therefore, the impervious surface would not substantially increase. The proposed project would maintain existing drainage patterns and storm drainage would be re-routed to avoid the proposed building footprint, through the addition of several storm drain manholes located to the east and north of the proposed building. Infiltration does not appear to be feasible at the proposed project site due to the presence of relatively shallow granitic material and perched groundwater. Additional stormwater treatment would be provided through capture and reuse systems or biofiltration planters, if required. Additionally, any construction that involves the disturbance of over one acre of land requires coverage under the National Pollutant Discharge Elimination System (NPDES) Statewide General Permit for Discharge of Stormwater Associated with Construction Activity. Therefore, the proposed project would not result in any significant new, or substantially greater, impacts to hydrology and water quality beyond those identified in the 1988 FEIR.

3.9 Land Use and Planning

The 1988 FEIR determined there was no significant impacts to land use. While the CSU is not subject to local land use regulations, as a state entity, the Heart of the City Specific Plan specified goals and land use objectives which included the development of the (then) future campus. The City's general plan land use designation for the campus site is Public/Institutional, which is consistent with the development of the university.

The Campus Master Plan identifies the current and future development of facilities to serve the proposed enrollment of the university. The Campus Master Plan was originally adopted in March 1988, when the campus was established, and most recently amended in January 2018. The Campus Master Plan identifies an ultimate enrollment of 25,000 Full Time Equivalent Students (FTES). The campus currently has an enrollment of 12,864-FTES (CSUSM 2023a). The proposed project is shown as part of Building 38, University Village. The proposed project would be a single structure with four wings, rather than two adjacent structures. Therefore, a Minor Amendment to the Campus Master Plan may be required. However, the project is consistent with the Campus Master Plan and the land use analysis of the 1988 FEIR. Therefore, the proposed project would not result in any significant new, or substantially greater, land use impacts beyond those identified in the 1988 FEIR.

3.10 Natural Resources

The 1988 FEIR determined that the project did not result in any significant adverse impacts to natural resources, including mineral resources. The California Division of Mines and Geology did not identify the aggregate resources found on the site as significant mineral resources. As part of the campus construction, minerals were extracted onsite and were used as fill for development of the campus. The proposed project is within a previously developed site (Parking Lot O) considered in the 1988 FEIR. Therefore, the proposed project would not result in any significant new, or substantially greater, impacts to natural resources beyond those identified in the 1988 FEIR.

3.11 Noise

Vehicular Noise

The 1988 FEIR concluded that the increase in traffic noise impacts from the 1988 Campus Master Plan project resulted in less than significant impacts on the surrounding the area. The land uses surrounding the project are commercial and industrial, and are not considered sensitive land uses, therefore, are subject to fewer community noise exposure restrictions. Development of the campus generated traffic primarily along commercial streets which did not create adverse noise impacts.

The proposed project is consistent with the Campus Master Plan and is compatible with the surrounding land uses of student residential buildings. The proposed project would not generate additional FTES, as discussed in Air Quality. Therefore, the proposed project would not result in any significant new, or substantially greater, mobile noise impacts beyond those identified in the 1988 FEIR.

Construction Noise

The 1988 FEIR concluded that noise impacts resulting from the Campus Master Plan project construction activities were less than significant with the implementation of mitigation measures. Construction noises represent a short-term impact on ambient noise levels and as described in vehicular noise levels, primarily affected commercial and industrial land uses, that are not considered sensitive to construction noise. To mitigate construction noise near residential areas, the FEIR included measures to limit campus construction activities to daytime hours (7 a.m. to 7 p.m.) on weekdays. To reduce the impact of earth moving equipment, hospital grade mufflers were required to improve performance by approximately five to ten dB and engines were tuned to further lower construction noise levels. In addition, smaller dozers are to be used, when feasible. Other mitigation measures addressed the extraction of aggregate for campus construction, and are not applicable to the proposed project.

The proposed project would generate temporary noise from construction activities. The project would be subject to applicable mitigation measures to reduce the construction noise impact. Therefore, the proposed project would not result in any significant new, or substantially greater, construction noise impacts beyond those identified in the 1988 FEIR.

3.12 Population and Housing

The 1988 FEIR concluded that an increase in student population and housing was in demand at the time and would serve the community. CSUSM aided in the overcapacity that San Diego State University was experiencing. An analysis of the County projected long-term population, the percentage of total County population enrolled at CSUSD,

and the local and regional demographic characteristics, qualifications, and occupations were determined to be positive indicators for the support for the University. The 1988 determined the project created a less than significant impact to population and housing.

The CSUSM Master plan identifies 25,000 FTES, which is greater than the current enrollment of 12,864. The proposed project would provide capacity to house 555 on-campus students, which would alleviate housing demand within the surrounding community. Therefore, the proposed project would not result in any significant new, or substantially greater, impacts to population and housing beyond those identified in the 1988 FEIR.

3.13 Public Services and Utilities

Fire/Police

Police protection for the site is provided by the San Diego County Sheriff's Department. The 1988 Campus Master Plan identified no additional impacts to police services. The CSU maintains and operates its own public safety and public protection for the campus, which assists in reducing the number of potential service calls to the San Diego County Sheriff's Department. Development of the campus did, however, induce a need for additional fire personnel at the project buildout and contributed to an increased cumulative demand on the San Marcos Fire Department. Built-in fire protection measures were incorporated into construction plans. Construction activities were coordinated with the San Diego County Sheriff to minimize road closures and determine road detours. Impacts related to fire and police services were found less than significant.

Since the establishment of the CSUSM campus, the University Police Department (UPD) now has primary jurisdiction over the campus, as well as off-campus student residences at the QUAD and North Commons and the Extended Learning Building. UPD has concurrent jurisdiction with the San Diego County Sheriff's Department over the immediate surrounding area. The service provided by UPD further should further reduce the service demands on the Sheriff's Department identified in the prior EIR.

San Marcos Fire Department Stations 1 (180 W. Mission Road) and 3 (404 Woodland Parkway) are the closest responders for fire and medical emergencies. Each station is approximately 1.8 miles from the project site as measured on surface streets. Station 4 (204 San Elijo Road) is one mile further, but not significantly greater in terms of response time (due to the access afforded by S. Twin Oaks Valley Road). The project is located directly adjacent to the existing University Village and would not be expected to add to existing response times for student housing, such that additional fire facilities would be required.

The proposed project demand is consistent with the master planned development and within the planned enrollment level of 25,000 FTES. Therefore, the proposed project would not result in any significant new, or substantially greater, impacts to emergency services beyond those identified in the 1988 FEIR.

Electricity/Gas

The San Diego Gas and Electric (SDG&E) did not foresee any issues servicing the proposed CSUSM Campus and identified a possibility of relocation of underground existing SDG&E facilities. In order to service project buildout needs, a small electrical substation was required to be built to serve off the existing 69 KV lines. It was also determined that the campus project generated a demand for gas that required the extension of a 16-inch gas line to serve the project. With the mitigation measures described in the FEIR, the electricity and gas impacts for the 1988 Campus Master Plan were reduced to less than significant.

The Basis of Design identifies existing electrical and gas connections within University Village will serve the proposed project. In addition, as described in Greenhouse Gas Emissions, above, the campus is constructing a solar microgrid to offset the energy usage of the proposed project. Therefore, the proposed project would not result in any significant new, or substantially greater, impacts to energy utilities beyond those identified in the 1988 FEIR.

Water/Wastewater

It was determined in the 1988 FEIR that the Campus Master Plan would not have a significant impact on water or wastewater. Existing water service levels were sufficient to meet the campus demands. The campus created a need for expanding existing sewer facilities to serve the project area. The City was responsible for the undergrounding of required water and sewer facilities.

The proposed project would connect to existing water and wastewater connections on campus. The main water line that is the singular feed to the University Village Apartments would have a temporary water-main shut down during construction of the project as the new service is installed. The existing 12-inch water service would be demolished, and a new 12-inch water service would be provided through a new connection to the campus water main in Campus View Drive. To minimize system downtimes, existing services would be re-fed where other conflicts with the proposed building footprint occur. The proposed water service connection for domestic water and fire protection would be from an extension of the existing 12-inch water service in Parking Lot O.

The proposed project is consistent with the Campus Master Plan and would not exceed the planned enrollment capacity. Therefore, the proposed project would not result in any significant new, or substantially greater, impacts to water/wastewater utilities beyond those identified in the 1988 FEIR.

3.14 Transportation

Regional access to the campus area is provided by State Route (SR) 78 via interchanges with Twin Oaks Valley Road and Richland Road/Barham Drive. Access to the University site is at three locations: Twin Oaks Valley Road to the west, Barham Drive to the north, and La Moree Road to the east. The 1988 FEIR determined that impacts to transportation were less than significant with the implementation of roadway mitigation measures. Mitigation measures include coordination of transit needs with the City of San Marcos and the North County Transit District to accommodate future public transportation expansion to fit campus needs (note that since the certification of the FEIR transit was extended to the campus and considered in a 1990 Addendum to the FEIR)Mitigation measures included the dedication of various designated rights-of-way for roadway improvements, and consideration of a potential grade separation on Barham at Twin Oaks.

The Campus Master Plan identifies an enrollment of 25,000 FTES, which was the basis of the FEIR transportation analysis. Current enrollment is 12,864 FTES. The proposed addition of approximately 555 student residents would not increase FTES, as the project objective is to house first-year students that would otherwise live off campus. Thus, the proposed project would still be consistent with the FTE in the prior Master Plan EIR, and transportation impacts are assumed to be consistent with that analysis.

It is noted that as of July 1, 2020, CEQA relies on vehicle miles traveled (VMT) to evaluate transportation impacts instead of LOS. However, VMT is not “new information” under Guidelines Section 15162, as it was considered in the 1988 FEIR (even though LOS was used as the metric for transportation impacts). Therefore, the question regarding VMT is limited to whether there have been changes to the proposed project that would result in an

increase in VMT relative to the approved Master Plan. The proposed project is consistent with the Campus Master Plan and would not increase FTES enrollment. Provision of on-campus housing is generally understood to reduce overall campus VMT, by eliminating the need for student commutes.

Therefore, the proposed project is consistent with the transportation analysis of the 1988 FEIR and would not result in any significant new, or substantially greater, transportation impacts beyond those identified in the 1988 FEIR.

3.15 Landform and Topography

The 1988 FEIR identified a significant amount of grading of the project site. Approximately 3,912,000 cubic yards of cut and 1,912,000 cubic yards of fill was required for the project. Grading was significant during phase two due to significant alterations (cut slopes) to the northwest facing slopes of the major north-south trending ridgeline in the southerly section of the site. The grading of the site followed the natural existing topography and landforms. The most valuable topographic resources of the site, including the ridgeline and eastern slopes were preserved to maximize natural contours. Impacts to landform and topography were found less than significant with the exception of the Phase 2 aggregate resource extraction area. The impacts associated with the cuts associated with the extraction area in phase 2 remained significant.

The proposed project would not substantially alter the existing landform and topography. The project site is currently a parking lot with perimeter landscaping. Cuts and fills would be required in the north portion of the dining facility to achieve the desired finish floor elevations. The east and south wing of the residential towers would require fill to achieve the desired finish floor elevations. Retaining structures, dropped foundations, and sloped foundations would be required to achieve desired grades. The topography of the proposed project site shifts about 30 feet with elevation changes; the site design uses this topography through access to outdoor spaces at differing levels. As discussed I Aesthetics, above, the proposed project would not block or alter existing ridgelines. Therefore, the project would not result in any significant new, or substantially greater, impacts to landform and topography beyond those identified in the 1988 FEIR.

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4 Conclusion

As discussed in Chapter 3, the proposed project would not result in any significant new, or substantially greater, impacts beyond those identified in the 1988 FEIR. The project is consistent with the Campus Master Plan in terms of project location and use, and consistent with planned enrollment. Based on these findings, the project is consistent with, and within the analysis parameters of, the 1988 FEIR. Mitigation measures contained in the adopted Mitigation Monitoring and Reporting Programs from the 1988 FEIR would be implemented as applicable to this individual project. As supported by the substantial evidence provided in this Finding of Significance, additional environmental documentation is not required under CEQA.

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5 References and Preparers

5.1 References Cited

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5.2 List of Preparers

CSUSM

Michelle Alves, Campus Planner

DUDEK

Brian Grattidge, Project Manager
Tuesday Christopher, Analyst
Matt Morales, Air Quality Specialist
Kelsey Bacon, Geographic Information Systems Analyst

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SOURCE: Bing Aerial Maps

DUDEK

0 500 1,000 Feet

FIGURE 1

Project Location

UVSS Dorm & Dining Project

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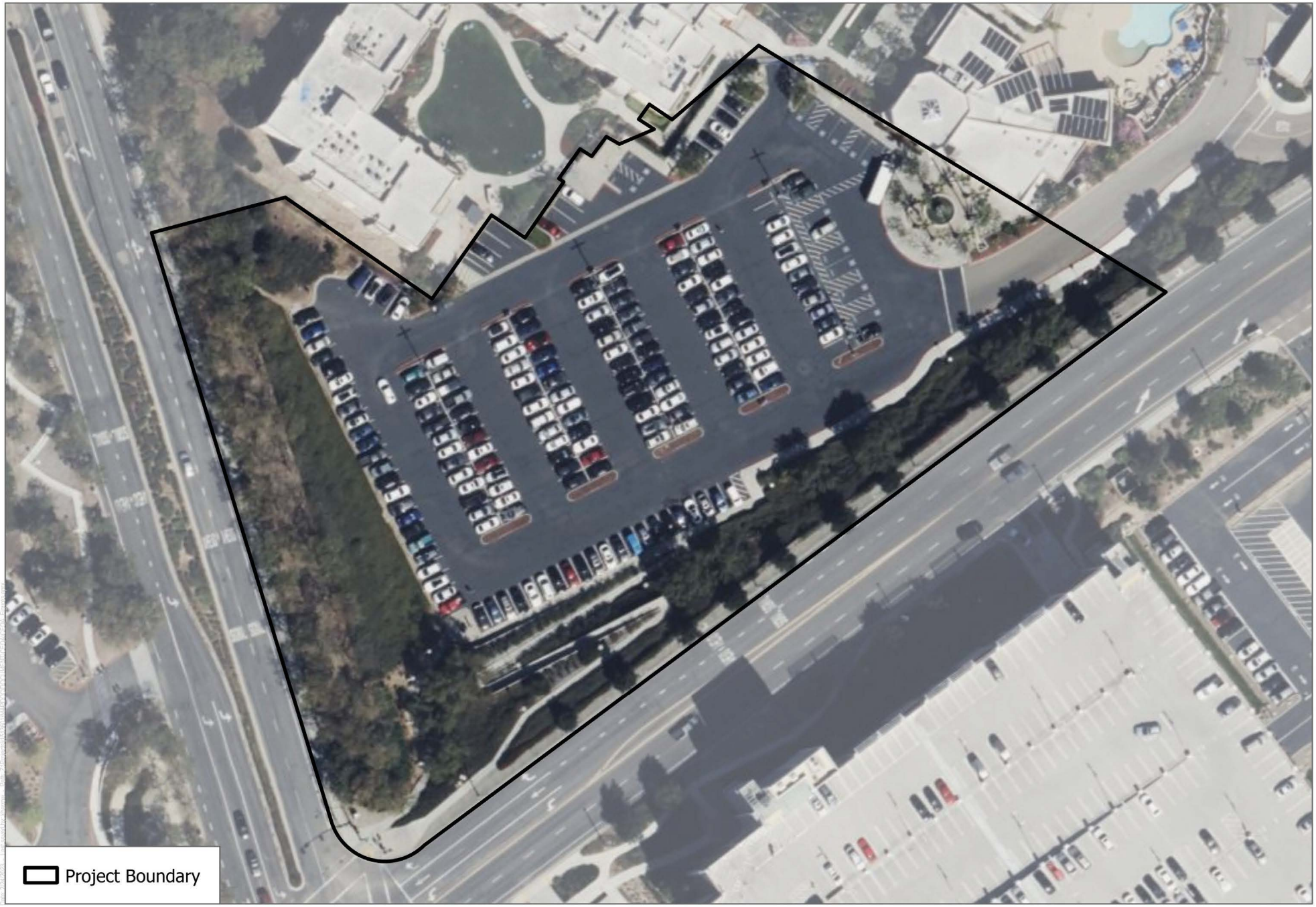

SOURCE: Bing Aerial Maps

DUDEK

0 50 100 Feet

FIGURE 2

Project Site

UVSS Dorm & Dining Project

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SOURCE: CSUSM, Gensler, McCarthy, LandLab 2023

FIGURE 3

Site Plan

UVSS Dorm & Dining Project

DUDEK

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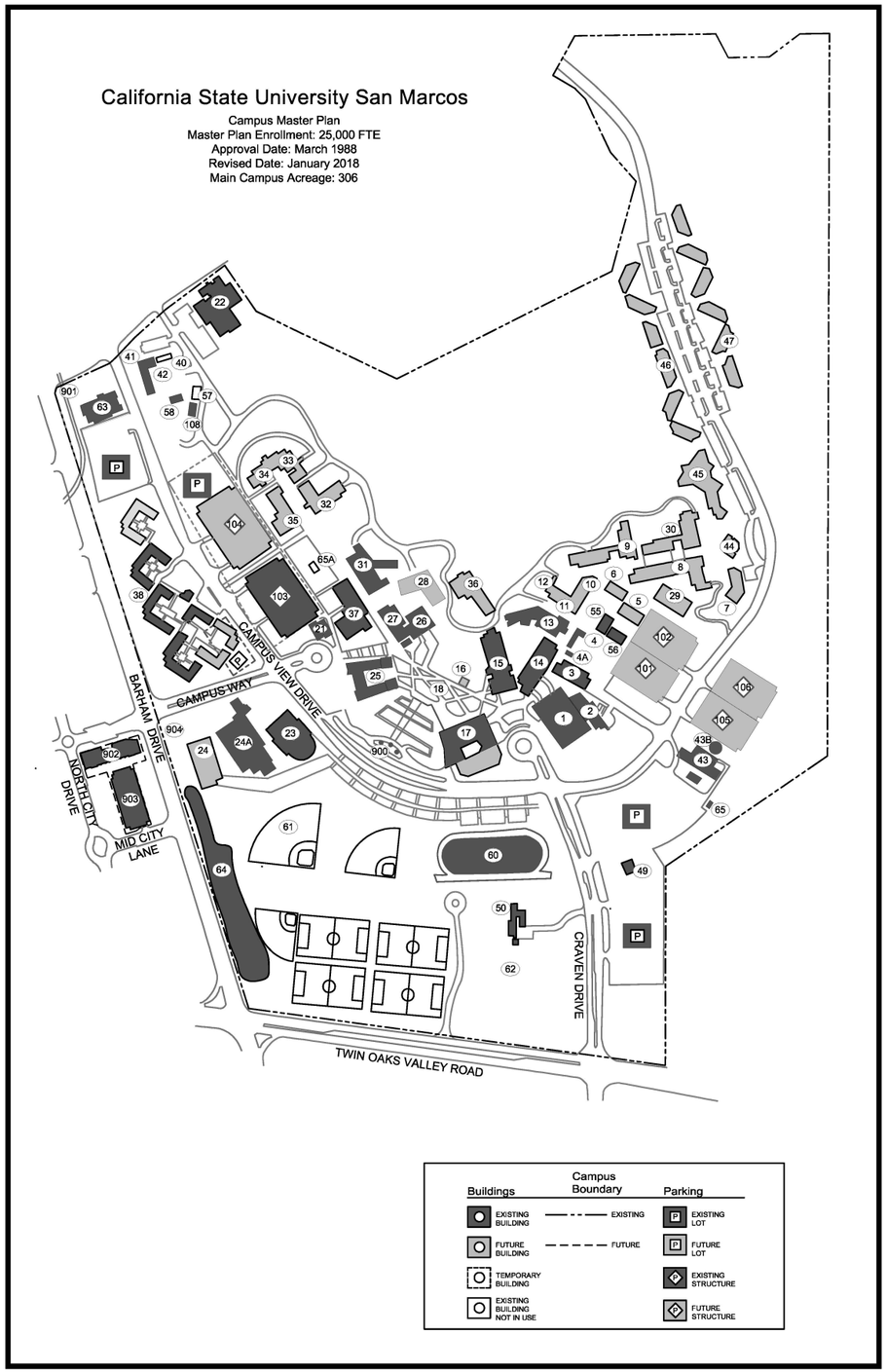

California State University **San Marcos**

Master Plan Enrollment: 25,000 FTE

Master Plan approved by the Board of Trustees: March 1988

Master Plan Revision approved by the Board of Trustees: May 1990, May 1992, November 2001, January 2018

1. Craven Hall
2. University Commons
3. Science Hall I
4. Veterans Center
4A. Veterans Center
5. *Laboratory Building*
6. *Laboratory Building*
7. *Laboratory Building*
8. *Laboratory Building*
9. *Laboratory Building*
10. *Food Service*
11. *Lecture*
12. *Lecture*
13. Markstein Hall
14. Academic Hall I
15. University Hall
16. *Tower*
17. Kellogg Library
21. Student Health and Counseling Services Building
22. Center for Children and Families
23. Clarke Field House/University Student Union
24. *Physical Education Building*
24A. The Sports Center
25. University Student Union
26. Arts Building
27. Arts Theater Building
28. *Arts and Humanities Hall II*
29. *Lecture Building*
30. *Lecture Building*
31. Social and Behavioral Sciences Building
32. *Humanities Building*
33. *Laboratory Building*
34. *Laboratory Building*
35. *Laboratory Building*
36. *Classroom/Lab/Office Building*
37. Science Hall II
38. University Village Apartments
40. PDC Modular Building (Temporary)
41. University Services Building
42. Physical Plant/Corporation Yard
43. Central Utilities Plant
43B. Fuel Cell
44. *Student Housing Commons*
45. *Student Housing*
46. *Student Housing*
47. *Student Housing*
49. Telecommunications Building
50. The McMahan House
55. Foundation Classroom Building (Temporary)
56. Foundation Classroom Building (Temporary)
57. Corporation Yard (Temporary)
58. Facility Services Training Center
60. Mangrum Track
61. *Athletic Fields*
62. *Open Space Reserve*
63. Public Safety Building
64. Wetlands Reserve
65. Greenhouse
65A. Biology Greenhouse (Temporary)
101. *Parking Structure*
102. *Parking Structure*
103. Parking Structure I (PS1)
104. *Parking Structure*
105. *Parking Structure*
106. *Parking Structure*
108. Facility Services Storage Trailer
900. Transit Center
901. Sprinter Station (Light Rail)
902. Extended Learning Building
903. Parking Structure
904. Pedestrian Bridge

LEGEND: Existing Facility / *Proposed Facility*

NOTE: Existing building numbers correspond with building numbers in the Space and Facilities Data Base (SFDB)

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View from E. Barham Dr./Campus Way

FIGURE 5
Project Rendering
UVSS Dorm & Dining Project

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Appendix A
Air Quality Data

CSUSM UVSS Project Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	CSUSM UVSS Project
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	9.80
Location	303 Campus View Dr, San Marcos, CA 92078, USA
County	San Diego
City	San Marcos
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6292
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	208	Dwelling Unit	2.27	127,000	43,560	0.00	555	Dorm
High Turnover (Sit Down Restaurant)	10.0	1000sqft	0.23	10,000	0.00	0.00	—	Dining

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.33	1.98	21.2	19.9	0.05	0.81	3.85	4.67	0.75	1.63	2.39	—	6,737	6,737	0.33	0.66	8.89	6,950
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.33	42.3	16.7	19.0	0.03	0.69	1.45	1.92	0.63	0.35	0.85	—	4,216	4,216	0.19	0.16	0.20	4,268
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.57	2.41	8.53	13.3	0.02	0.31	1.03	1.33	0.29	0.25	0.52	—	2,993	2,993	0.13	0.12	2.17	3,032
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.29	0.44	1.56	2.42	< 0.005	0.06	0.19	0.24	0.05	0.04	0.09	—	496	496	0.02	0.02	0.36	502

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2024	2.33	1.98	21.2	19.9	0.05	0.81	3.85	4.67	0.75	1.63	2.39	—	6,737	6,737	0.33	0.66	8.89	6,950
2025	2.21	1.88	11.9	19.4	0.03	0.41	1.45	1.87	0.38	0.35	0.73	—	4,259	4,259	0.18	0.15	7.03	4,317
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.33	1.98	16.7	19.0	0.03	0.69	1.45	1.92	0.63	0.35	0.85	—	4,216	4,216	0.19	0.16	0.20	4,268
2025	2.20	1.87	11.9	18.5	0.03	0.41	1.45	1.87	0.38	0.35	0.73	—	4,178	4,178	0.19	0.16	0.18	4,230
2026	2.06	42.3	11.4	18.0	0.03	0.37	1.45	1.82	0.34	0.35	0.69	—	4,139	4,139	0.18	0.16	0.17	4,191
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.33	1.11	8.27	10.9	0.02	0.31	0.91	1.22	0.29	0.23	0.52	—	2,523	2,523	0.11	0.12	1.70	2,562
2025	1.57	1.33	8.53	13.3	0.02	0.29	1.03	1.33	0.27	0.25	0.52	—	2,993	2,993	0.13	0.11	2.17	3,032
2026	0.12	2.41	0.71	1.14	< 0.005	0.03	0.06	0.09	0.02	0.02	0.04	—	220	220	0.01	0.01	0.12	222
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.24	0.20	1.51	1.99	< 0.005	0.06	0.17	0.22	0.05	0.04	0.09	—	418	418	0.02	0.02	0.28	424
2025	0.29	0.24	1.56	2.42	< 0.005	0.05	0.19	0.24	0.05	0.04	0.09	—	496	496	0.02	0.02	0.36	502
2026	0.02	0.44	0.13	0.21	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	0.01	—	36.3	36.3	< 0.005	< 0.005	0.02	36.7

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.62	4.65	1.71	13.5	0.01	0.11	0.00	0.11	0.11	0.00	0.11	163	1,043	1,207	16.5	0.05	16.5	1,650
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.44	3.53	1.60	1.25	0.01	0.10	0.00	0.10	0.10	0.00	0.10	163	1,010	1,173	16.5	0.05	16.5	1,617

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.71	3.80	0.86	6.56	< 0.005	0.06	0.00	0.06	0.06	0.00	0.06	163	881	1,044	16.4	0.05	16.5	1,487
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.13	0.69	0.16	1.20	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	27.0	146	173	2.72	0.01	2.74	246

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	1.18	4.28	0.12	12.2	< 0.005	< 0.005	—	< 0.005	0.01	—	0.01	0.00	33.3	33.3	< 0.005	< 0.005	—	33.5
Energy	0.08	0.04	0.67	0.41	< 0.005	0.05	—	0.05	0.05	—	0.05	—	832	832	0.07	< 0.005	—	834
Water	—	—	—	—	—	—	—	—	—	—	—	19.8	9.22	29.0	2.04	0.05	—	94.6
Waste	—	—	—	—	—	—	—	—	—	—	—	143	0.00	143	14.3	0.00	—	502
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16.5	16.5
Stationary	0.36	0.33	0.92	0.84	< 0.005	0.05	—	0.05	0.05	—	0.05	—	169	169	0.01	< 0.005	—	169
Total	1.62	4.65	1.71	13.5	0.01	0.11	0.00	0.11	0.11	0.00	0.11	163	1,043	1,207	16.5	0.05	16.5	1,650
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	3.16	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.08	0.04	0.67	0.41	< 0.005	0.05	—	0.05	0.05	—	0.05	—	832	832	0.07	< 0.005	—	834
Water	—	—	—	—	—	—	—	—	—	—	—	19.8	9.22	29.0	2.04	0.05	—	94.6

Waste	—	—	—	—	—	—	—	—	—	—	—	143	0.00	143	14.3	0.00	—	502
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16.5	16.5
Stationary	0.36	0.33	0.92	0.84	< 0.005	0.05	—	0.05	0.05	—	0.05	—	169	169	0.01	< 0.005	—	169
Total	0.44	3.53	1.60	1.25	0.01	0.10	0.00	0.10	0.10	0.00	0.10	163	1,010	1,173	16.5	0.05	16.5	1,617
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.58	3.71	0.06	6.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	16.4	16.4	< 0.005	< 0.005	—	16.5
Energy	0.08	0.04	0.67	0.41	< 0.005	0.05	—	0.05	0.05	—	0.05	—	832	832	0.07	< 0.005	—	834
Water	—	—	—	—	—	—	—	—	—	—	—	19.8	9.22	29.0	2.04	0.05	—	94.6
Waste	—	—	—	—	—	—	—	—	—	—	—	143	0.00	143	14.3	0.00	—	502
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16.5	16.5
Stationary	0.05	0.05	0.13	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.1	23.1	< 0.005	< 0.005	—	23.2
Total	0.71	3.80	0.86	6.56	< 0.005	0.06	0.00	0.06	0.06	0.00	0.06	163	881	1,044	16.4	0.05	16.5	1,487
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.11	0.68	0.01	1.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.72	2.72	< 0.005	< 0.005	—	2.73
Energy	0.01	0.01	0.12	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	138	138	0.01	< 0.005	—	138
Water	—	—	—	—	—	—	—	—	—	—	—	3.28	1.53	4.81	0.34	0.01	—	15.7
Waste	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.37	0.00	—	83.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.74	2.74
Stationary	0.01	0.01	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.83	3.83	< 0.005	< 0.005	—	3.84
Total	0.13	0.69	0.16	1.20	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	27.0	146	173	2.72	0.01	2.74	246

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62	—	2,494	2,494	0.10	0.02	—	2,502
Demolition	—	—	—	—	—	—	0.91	0.91	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62	—	2,494	2,494	0.10	0.02	—	2,502
Demolition	—	—	—	—	—	—	0.91	0.91	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.62	1.67	< 0.005	0.07	—	0.07	0.06	—	0.06	—	260	260	0.01	< 0.005	—	261
Demolition	—	—	—	—	—	—	0.09	0.09	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.03	0.30	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.0	43.0	< 0.005	< 0.005	—	43.1
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.62	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	121	121	0.01	< 0.005	0.49	123
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	0.02	1.05	0.37	< 0.005	0.01	0.20	0.21	0.01	0.05	0.07	—	780	780	0.04	0.12	1.68	820
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.54	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	114	114	0.01	< 0.005	0.01	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	0.02	1.09	0.38	< 0.005	0.01	0.20	0.21	0.01	0.05	0.07	—	780	780	0.04	0.12	0.04	818
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.0	12.0	< 0.005	< 0.005	0.02	12.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.11	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	81.2	81.2	< 0.005	0.01	0.08	85.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.99	1.99	< 0.005	< 0.005	< 0.005	2.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	0.01	14.1

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.31	12.7	11.4	0.03	0.55	—	0.55	0.51	—	0.51	—	2,716	2,716	0.11	0.02	—	2,725
Dust From Material Movement	—	—	—	—	—	—	0.63	0.63	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	44.6	44.6	< 0.005	< 0.005	—	44.8
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.39	7.39	< 0.005	< 0.005	—	7.42
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	72.6	72.6	< 0.005	< 0.005	0.29	73.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.30	0.08	5.32	1.89	0.02	0.07	1.00	1.07	0.07	0.27	0.34	—	3,949	3,949	0.21	0.63	8.49	4,151
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	64.9	64.9	< 0.005	0.01	0.06	68.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.01	11.3

3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.96	1.65	15.9	15.4	0.02	0.74	—	0.74	0.68	—	0.68	—	2,454	2,454	0.10	0.02	—	2,462
Dust From Material Movement	—	—	—	—	—	—	2.77	2.77	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.52	0.51	< 0.005	0.02	—	0.02	0.02	—	0.02	—	80.7	80.7	< 0.005	< 0.005	—	80.9
Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.4	13.4	< 0.005	< 0.005	—	13.4
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.49	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	96.8	96.8	< 0.005	< 0.005	0.39	98.3

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.30	0.08	5.33	1.90	0.02	0.07	1.00	1.07	0.07	0.27	0.34	—	3,955	3,955	0.21	0.63	8.50	4,158
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.03	3.03	< 0.005	< 0.005	0.01	3.07
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.18	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	130	130	0.01	0.02	0.12	137
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.5	21.5	< 0.005	< 0.005	0.02	22.6

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.58	1.32	11.2	11.9	0.02	0.46	—	0.46	0.42	—	0.42	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.58	1.32	11.2	11.9	0.02	0.46	—	0.46	0.42	—	0.42	—	2,201	2,201	0.09	0.02	—	2,209

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.57	4.90	5.21	0.01	0.20	—	0.20	0.18	—	0.18	—	961	961	0.04	0.01	—	964
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.10	0.89	0.95	< 0.005	0.04	—	0.04	0.03	—	0.03	—	159	159	0.01	< 0.005	—	160
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.70	0.64	0.52	7.61	0.00	0.00	1.30	1.30	0.00	0.31	0.31	—	1,490	1,490	0.07	0.05	5.98	1,513
Vendor	0.05	0.02	0.84	0.39	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	608	608	0.03	0.08	1.56	636
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.70	0.64	0.57	6.66	0.00	0.00	1.30	1.30	0.00	0.31	0.31	—	1,406	1,406	0.07	0.05	0.15	1,425
Vendor	0.05	0.02	0.87	0.40	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	608	608	0.03	0.08	0.04	634
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.27	0.25	2.95	0.00	0.00	0.56	0.56	0.00	0.13	0.13	—	619	619	0.03	0.02	1.12	628
Vendor	0.02	0.01	0.38	0.17	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	265	265	0.01	0.04	0.29	277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.05	0.05	0.05	0.54	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	0.01	< 0.005	0.19	104
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.0	44.0	< 0.005	0.01	0.05	45.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.06	0.88	7.57	8.47	0.02	0.29	—	0.29	0.27	—	0.27	—	1,572	1,572	0.06	0.01	—	1,578
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.38	1.55	< 0.005	0.05	—	0.05	0.05	—	0.05	—	260	260	0.01	< 0.005	—	261

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.68	0.62	0.47	7.13	0.00	0.00	1.30	1.30	0.00	0.31	0.31	—	1,461	1,461	0.07	0.05	5.48	1,483
Vendor	0.05	0.02	0.79	0.37	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	597	597	0.03	0.08	1.55	625
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.66	0.61	0.53	6.24	0.00	0.00	1.30	1.30	0.00	0.31	0.31	—	1,379	1,379	0.07	0.05	0.14	1,398
Vendor	0.05	0.02	0.83	0.38	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	598	598	0.03	0.08	0.04	624
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.43	0.37	4.53	0.00	0.00	0.92	0.92	0.00	0.22	0.22	—	994	994	0.05	0.04	1.69	1,009
Vendor	0.04	0.02	0.59	0.27	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	427	427	0.02	0.06	0.48	446
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	0.83	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	165	165	0.01	0.01	0.28	167
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	70.7	70.7	< 0.005	0.01	0.08	73.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.30	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	64.6	64.6	< 0.005	< 0.005	—	64.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.55	0.48	5.87	0.00	0.00	1.30	1.30	0.00	0.31	0.31	—	1,351	1,351	0.07	0.05	0.13	1,370
Vendor	0.05	0.02	0.79	0.36	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	587	587	0.02	0.08	0.04	613
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.0	40.0	< 0.005	< 0.005	0.06	40.6
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.2	17.2	< 0.005	< 0.005	0.02	18.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.63	6.63	< 0.005	< 0.005	0.01	6.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.85	2.85	< 0.005	< 0.005	< 0.005	2.98
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.67	5.88	8.19	0.01	0.25	—	0.25	0.23	—	0.23	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.32	0.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	68.1	68.1	< 0.005	< 0.005	—	68.4
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.3	11.3	< 0.005	< 0.005	—	11.3
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.57	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	132	132	0.01	0.01	0.01	133
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.28	7.28	< 0.005	< 0.005	0.01	7.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.21	1.21	< 0.005	< 0.005	< 0.005	1.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	42.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	2.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.10	1.17	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	270	270	0.01	0.01	0.03	274
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.9	14.9	< 0.005	< 0.005	0.02	15.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.47	2.47	< 0.005	< 0.005	< 0.005	2.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	472	472	0.04	< 0.005	—	473
High Turnover (Sit Down Restaurant)	0.03	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	360	360	0.03	< 0.005	—	361
Total	0.08	0.04	0.67	0.41	< 0.005	0.05	—	0.05	0.05	—	0.05	—	832	832	0.07	< 0.005	—	834
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	472	472	0.04	< 0.005	—	473
High Turnover (Sit Down Restaurant)	0.03	0.02	0.30	0.25	< 0.005	0.02	—	0.02	0.02	—	0.02	—	360	360	0.03	< 0.005	—	361
Total	0.08	0.04	0.67	0.41	< 0.005	0.05	—	0.05	0.05	—	0.05	—	832	832	0.07	< 0.005	—	834
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.01	< 0.005	0.07	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.1	78.1	0.01	< 0.005	—	78.3
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	59.6	59.6	0.01	< 0.005	—	59.8
Total	0.01	0.01	0.12	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	138	138	0.01	< 0.005	—	138

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	2.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.18	1.12	0.12	12.2	< 0.005	< 0.005	—	< 0.005	0.01	—	0.01	—	33.3	33.3	< 0.005	< 0.005	—	33.5
Total	1.18	4.28	0.12	12.2	< 0.005	< 0.005	—	< 0.005	0.01	—	0.01	0.00	33.3	33.3	< 0.005	< 0.005	—	33.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	2.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	3.16	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consum Products	—	0.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.10	0.01	1.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.72	2.72	< 0.005	< 0.005	—	2.73
Total	0.11	0.68	0.01	1.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.72	2.72	< 0.005	< 0.005	—	2.73

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	14.0	6.67	20.7	1.44	0.03	—	67.0
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	5.82	2.55	8.37	0.60	0.01	—	27.6
Total	—	—	—	—	—	—	—	—	—	—	—	19.8	9.22	29.0	2.04	0.05	—	94.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	14.0	6.67	20.7	1.44	0.03	—	67.0

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	5.82	2.55	8.37	0.60	0.01	—	27.6
Total	—	—	—	—	—	—	—	—	—	—	—	19.8	9.22	29.0	2.04	0.05	—	94.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	2.32	1.10	3.42	0.24	0.01	—	11.1
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	0.96	0.42	1.39	0.10	< 0.005	—	4.57
Total	—	—	—	—	—	—	—	—	—	—	—	3.28	1.53	4.81	0.34	0.01	—	15.7

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	79.3	0.00	79.3	7.92	0.00	—	277
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	64.1	0.00	64.1	6.41	0.00	—	224
Total	—	—	—	—	—	—	—	—	—	—	—	143	0.00	143	14.3	0.00	—	502

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	79.3	0.00	79.3	7.92	0.00	—	277
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	64.1	0.00	64.1	6.41	0.00	—	224
Total	—	—	—	—	—	—	—	—	—	—	—	143	0.00	143	14.3	0.00	—	502
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	13.1	0.00	13.1	1.31	0.00	—	45.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	10.6	0.00	10.6	1.06	0.00	—	37.1
Total	—	—	—	—	—	—	—	—	—	—	—	23.7	0.00	23.7	2.37	0.00	—	83.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.91	0.91

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16.5	16.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.91	0.91
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	15.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16.5	16.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.15	0.15
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.59	2.59
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.74	2.74

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.36	0.33	0.92	0.84	< 0.005	0.05	—	0.05	0.05	—	0.05	—	169	169	0.01	< 0.005	—	169
Total	0.36	0.33	0.92	0.84	< 0.005	0.05	—	0.05	0.05	—	0.05	—	169	169	0.01	< 0.005	—	169
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.36	0.33	0.92	0.84	< 0.005	0.05	—	0.05	0.05	—	0.05	—	169	169	0.01	< 0.005	—	169

Total	0.36	0.33	0.92	0.84	< 0.005	0.05	—	0.05	0.05	—	0.05	—	169	169	0.01	< 0.005	—	169
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.01	0.01	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.83	3.83	< 0.005	< 0.005	—	3.84
Total	0.01	0.01	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.83	3.83	< 0.005	< 0.005	—	3.84

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	3/6/2024	4/26/2024	5.00	38.0	—
Site Preparation	Site Preparation	4/27/2024	5/6/2024	5.00	6.00	—
Grading	Grading	5/7/2024	5/22/2024	5.00	12.0	—
Building Construction	Building Construction	5/23/2024	1/15/2026	5.00	431	—
Paving	Paving	1/16/2026	2/12/2026	5.00	20.0	—
Architectural Coating	Architectural Coating	2/13/2026	3/12/2026	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48

Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	12.0	LDA,LDT1,LDT2
Demolition	Vendor	—	7.63	HHDT,MHDT
Demolition	Hauling	10.6	20.0	HHDT

Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.63	HHDT,MHDT
Site Preparation	Hauling	53.8	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	12.0	LDA,LDT1,LDT2
Grading	Vendor	—	7.63	HHDT,MHDT
Grading	Hauling	53.9	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	154	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	23.9	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	12.0	LDA,LDT1,LDT2
Paving	Vendor	—	7.63	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	30.8	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.63	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	257,175	85,725	15,000	5,000	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	1,613	—
Site Preparation	1,292	1,292	9.00	0.00	—
Grading	2,585	2,585	12.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%

High Turnover (Sit Down Restaurant)	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	589	0.03	< 0.005
2025	0.00	589	0.03	< 0.005
2026	0.00	589	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	208

Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
257175	85,725	15,000	5,000	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	0.00	45.1	0.0330	0.0040	1,472,315
High Turnover (Sit Down Restaurant)	0.00	45.1	0.0330	0.0040	1,124,058

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	7,307,680	795,627
High Turnover (Sit Down Restaurant)	3,035,337	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	55.1	0.00
High Turnover (Sit Down Restaurant)	119	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	50.0	201	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	14.7	annual days of extreme heat
Extreme Precipitation	5.15	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	10.5	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score

Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	45.0
AQ-PM	13.0
AQ-DPM	26.6
Drinking Water	42.5
Lead Risk Housing	8.67
Pesticides	45.5
Toxic Releases	15.2
Traffic	47.6
Effect Indicators	—
CleanUp Sites	64.7
Groundwater	64.2
Haz Waste Facilities/Generators	89.2
Impaired Water Bodies	96.3
Solid Waste	66.7
Sensitive Population	—
Asthma	4.85
Cardio-vascular	24.9
Low Birth Weights	51.3
Socioeconomic Factor Indicators	—

Education	15.8
Housing	76.0
Linguistic	24.8
Poverty	42.6
Unemployment	26.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	51.4307712
Employed	45.27139741
Median HI	41.7425895
Education	—
Bachelor's or higher	62.78711664
High school enrollment	100
Preschool enrollment	58.10342615
Transportation	—
Auto Access	68.11240857
Active commuting	53.07327088
Social	—
2-parent households	7.301424355
Voting	59.822918
Neighborhood	—
Alcohol availability	92.87822405
Park access	48.03028359
Retail density	31.46413448

Supermarket access	39.13768767
Tree canopy	56.26844604
Housing	—
Homeownership	52.53432568
Housing habitability	41.44745284
Low-inc homeowner severe housing cost burden	15.62941101
Low-inc renter severe housing cost burden	33.7482356
Uncrowded housing	68.66418581
Health Outcomes	—
Insured adults	60.27203901
Arthritis	0.0
Asthma ER Admissions	98.8
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	69.2
Cognitively Disabled	43.0
Physically Disabled	68.4
Heart Attack ER Admissions	99.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0

Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	62.4
SLR Inundation Area	0.0
Children	81.0
Elderly	49.5
English Speaking	57.5
Foreign-born	12.3
Outdoor Workers	84.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	77.2
Traffic Density	67.0
Traffic Access	23.0
Other Indices	—
Hardship	28.4
Other Decision Support	—
2016 Voting	74.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	34.0
Healthy Places Index Score for Project Location (b)	51.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	137 ksf total building (127,000 sf dorm plus 10,000 sf dining hall) to serve 555 students. 1- acre landscaping assumed
Construction: Construction Phases	Adjusted default schedule to match the anticipated schedule provided by the applicant
Operations: Hearths	No fireplaces
Operations: Energy Use	Electricity for UVSS off-set by solar micro grid. Default natural gas assumed